

12 April 1956
DRAFT

USAF Declass/Release Instructions On File

GUIDED MISSILE CONTRIBUTION TO

NIE 11-6-56

IV. Soviet Capabilities in Research and Development Related to Military and Industrial Technology

A. Evaluate present Soviet capabilities in the following fields, giving examples of outstanding recent developments. Indicate probable future trends.

1. Atomic Energy, including weapons, power and propulsion.
2. Guided Missiles Systems.*

a. We have estimated that the strategic requirements of the USSR would dictate a major effort in the field of guided missiles and that the USSR has the basic scientific and technical capabilities to support a comprehensive research and development program. We have concluded on the basis of recent statements of Soviet leaders regarding Soviet guided missiles, the large number of personalities and activities believed to be associated with the Soviet missile program, our knowledge of the Soviet exploitation of the German missile experience, and significant additional evidence, that the USSR is engaged in an extensive

*For more detailed information on Soviet guided missile capabilities see NIE 11-12-55 dated 20 December 1955 and NIE 11-5-56 (to be published in July 1956).

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guided missile program on a high priority. The Soviet guided missile capability has been growing and will continue to develop within the next several years.

b. We have further concluded that the USSR now has missile systems in all categories in at least limited operational ^{status} use; however, we have ^{very little} ~~limited~~ intelligence on the specifics of the missile types the USSR is presently developing, or may now have in operational use.

(1) Surface-to-Air Missile

Missile installations have been observed in the vicinity of Moscow which we believe to be surface-to-air guided missile launching sites in support of the defense of Moscow. We have concluded that the USSR now has an air defense missile system in at least limited operational use. We expect the USSR to continue to give high priority to developing improved surface-to-air missiles ^{because of} ~~due to~~ its air defense deficiencies.

(2) Surface-to-Surface Ballistic Missiles

Our information indicates that considerable and increasing numbers of ballistic missiles are being tested at the Kapustin Yar guided missile test range. This information does not permit accurate assessments of the actual ranges involved, but it does indicate the scale of the program. We believe that a full scale, surface-to-surface ballistic missile program is underway in the USSR. Aside from tactical missiles for support of its

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field forces, we believe that for the next few years, this effort will probably be concentrated more upon development of improved missiles than upon quantity production of interim types.

(3) Air-to-Air Missiles

of them
To bolster its air defense weaknesses, the USSR has prob-
ably assigned a high priority to ^{the development of} air-to-air missiles. We
have no significant intelligence information in this field.

(4) Air-to-Surface Missiles

We expect the USSR to place ^{the development of} an all-weather, air-to-surface
missile with nuclear warhead on a high priority within the next
few years to offset the increasing effectiveness of Allied air
defenses around ^{land and ship} key targets ~~areas~~. *Undoubtedly some effort has
we believe that*
been made to produce ~~in quantity~~ a precision weapon for effective
antiship attacks.

(5) Submarine-Launched Non-Ballistic Guided Missiles

We believe the USSR has a requirement ^{for} and is capable of *having*
developing ^{of} submarine-launched missiles for nuclear attacks on
US and Allied coastal areas.

3. Artificial Satellites

We believe the USSR possesses the basic scientific capabilities,
technical skills and other resources required to build and launch
an unmanned earth satellite vehicle. From recent statements by
Soviet officials and scientists we have concluded that the USSR is
placing considerable emphasis on this program.

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